indicating that someone is passing them too fast or some vehicles present on blind spots. It should be noted that haptic wearable warning device is applicable to various situations such as runners, walkers, bicyclists, motorcyclists, and the like. It should be further noted that haptic wearable device **306** may include a calibrator, which initializes or calibrates haptic wearable device **306** to specific arrange of applications. The calibrator may be controlled by the user or by a machine located remotely via wireless communications network.

[0036] The exemplary embodiment(s) of the present invention includes various processing steps, which will be described below. The steps of the embodiments may be embodied in machine or computer executable instructions. The instructions can be used to cause a general purpose or special purpose system, which is programmed with the instructions, to perform the steps of the present invention. Alternatively, the steps of the present invention may be performed by specific hardware components that contain hardwired logic for performing the steps, or by any combination of programmed computer components and custom hardware components. While embodiments of the present invention will be described with reference to the Internet, the method and apparatus described herein is equally applicable to other network infrastructures or other data communications environments.

[0037] FIG. **5** is a flowchart illustrating a process of providing haptic cues in response to one or more events in accordance with one embodiment of the present invention. At block **502**, the process senses a first event via a first component. The first event could be a heart rate, body temperature, a movement, and the like. The first component could be a sensor capable of detecting a heart rate. The process, for example, may detect a predefined movement, which occurs from a distant location or a nearby location. Upon detecting a moving object, the process calculates the speed and direction of the moving object and generates a haptic warning signal in response to the moving object. In one embodiment, the process is capable of providing an urgent haptic alert if the moving object is approaching quickly. Alternatively, the process generates a haptic warning that a moving object is passing by. If the sensor and haptic device are separate units, wireless communications network may be needed to logically connect the units together. After block **502**, the process proceeds to the next block.

[0038] At block **504**, upon sensing the first event, the process generates a first input in response to the first event. For example, when a sensor detects a heart rate from the user, the sensor converts the heart rate information to an input in a communication network protocol. If the sensor is a separate unit from the haptic device, the sensor transmits the input signal to the haptic device via a communication means. For example, a wireless communication network is used to transmit information between the sensor and the haptic device. The sensor, for instance, may be attached to the chest of a user and the haptic device may be worn on the wrist. After block **504**, the process proceeds to the next block.

[0039] At block **506**, the process receives the first input via a wireless network. It should be noted that if the sensor and the haptic device are constructed on the same unit, wireless communications network is not required. After block **506**, the process moves to the next block.

[0040] At block **508**, upon receipt of the first input, the process retrieves a first haptic signal from a tactile library. In one embodiment, the tactile library includes multiple haptic signals wherein each haptic signal indicates a specific type of tactile cues to be generated. The tactile library, in one embodiment, is a predefined table that can be updated by a user or a remote server. After block **508**, the process moves to the next block.

[0041] At block **510**, the process generates a first haptic feedback in response to the first haptic signal. In one embodiment, upon sensing a second event via a second component, the process generates a second input in response to the second event. After receiving the second input via the wireless communications network, the process retrieves a second haptic signal from the tactile library in response to the first input and the second input. A second haptic feedback in response to the second haptic signal is subsequently generated by the haptic device. For example, the process is capable of detecting a heart rate as well as a body temperature. Alternatively, the process is further capable of computing a speed of pacing in response to the heart rate and the body temperature, and subsequently fetching a haptic pacing sequence from the tactile library in response to the speed of pacing. It should be noted that producing a sequence of haptic feedback further includes activating the first component to generating the sequence of haptic feedback. In another embodiment, the process is capable of generating haptic feedback emulating natural sensations in response to a moving object. After block **510**, the process ends.

[0042] While particular embodiments of the present invention have been shown and described, it will be obvious to those skilled in the art that, based upon the teachings herein, changes and modifications may be made without departing from this invention and its broader aspects. Therefore, the appended claims are intended to encompass within their scope all such changes and modifications as are within the true spirit and scope of the exemplary embodiment(s) of is present invention.

What is claimed is:

1. A method for generating haptic cues, comprising:
sensing a first event via a first component;
generating a first input in response to the first event;
receiving the first input via a wireless network from the first component;
retrieving a first haptic signal from a tactile library in response to the first input; and
generating a first haptic feedback in response to the first haptic signal.

2. The method of claim **1**, comprising:
sensing a second event via a second component;
generating a second input in response to the second event;
receiving the second input via the wireless network from the second component;
retrieving a second haptic signal from the tactile library in response to the first input and the second input; and
generating a second haptic feedback in response to the second haptic signal.

3. The method of claim **2**, wherein sensing a first event includes detecting a heart rate; and wherein sensing a second event includes detecting a body temperature.

4. The method of claim **3**, wherein retrieving a second haptic signal from the tactile library in response to the first input and the second input includes:
computing a speed of pacing in response to the heart rate and the body temperature; and